Industrial Storm Water





Brian Wisnewski, Manager
Water Pollution Compliance Section
Bureau of Water, SCDHEC

Industrial Stormwater General NPDES Permit SCR000000

- Covers approximately 2200 industries in SC
- 11 different categories of industry based on SIC code
- Apparel manufacturing to zinc plating





"Stormwater discharge associated with industrial activity"

Discharge from any conveyance used for collecting and conveying stormwater from areas that are directly related to manufacturing, processing or raw material storage at an applicable industry.



Current Stormwater Permit

- Similar to the US EPA model permit of 1991
- Almost no submittal of monitoring data is required
- 2005 update included adding TMDLs [similar to EPA 2005 draft Multi-Sector General Permit (MSGP)]

Proposed New Stormwater Permit

- EPA Region 4 is discouraging extension of the existing permit
- Encouraging issuance of a permit similar to the current MSGP issued by EPA

Major Differences – S.C to MSGP

- Present permit <u>does not allow</u> the discharge of storm water which is covered by effluent limitations guidelines (8 sectors)
- New permit would allow that, but it adds effluent limitations for such storm water. And such a discharger must submit the monitoring data to the Department.
- Benchmarks, specific pollutant levels, a minimum of TSS, at which all sectors must carry out improvements of their storm water best management practices (BMP)

Major Differences - Continued

- Specific requirements are stated related to compliance with <u>water quality standards</u>
- Specific, minimum BMPs are stated in the permit for each of the categories
- Would require submittal of a <u>new NOI</u>, like EPA's. EPA's is 2 pages vs. our 1.

Example U.S. EPA BMP

- □ Glass, Clay, Cement, Concrete ...
 - E.3.2 Good Housekeeping Measures.

Prevent or minimize the discharge in storm water of spilled *material* from *pavements*.

Consider sweeping regularly or using other equivalent measures

... prevent the exposure of fine granular solids ... to stormwater ... by storing ... in enclosed silos

U.S. EPA MSGP Status

- The U.S. EPA MSGP is presently out of date (expired in 2005), possibly being issued about September 2008.
- We will try to include any changes to the issued U.S. EPA permit in the S.C. redraft before this is issued.

S.C. Permit - Fecal Coliforms

- Monitoring for fecal coliforms has been added for meat packing plants, domestic www plants, wool scouring, and raw hide handling.
- A benchmark, 400/100 ml, for fecal coliforms has been added for the same activities.

Monitoring Data

- For those categories with the addition of effluent limits in the new S.C. permit, the permit will require submittal of monitoring data and the Department will review the data.
- Such review could likely lead to additional compliance and enforcement actions.

Compliance Issues



Compliance Issues



Reporting

- U.S. EPA permit requires <u>immediate</u> submittal of monitoring data. We propose <u>annual</u> reporting, where <u>limits apply</u>.
- Benchmark data would require submittal only for an exceedance, within 30 days.

Follow-up Monitoring

- Follow-up monitoring is required when benchmark or limits-related monitoring exceeds stated criteria.
- 4 additional quarters for benchmark
- 1 additional sample for limits (plus annual)
 or impaired waters

Water Quality Monitoring

Impaired waters: "A water is impaired if it does not meet its designated uses." This includes:

-waters on the 303(d) list and those

-having an **approved TMDL** with the standard not yet achieved.

Impaired Waters w/o TMDL

(New req't from 2005 U.S. EPA draft MSGP.)

- New Discharges to Water-Quality-Impaired Receiving Waters.
- New discharges to impaired waters without approved TMDL will be required to get DHEC concurrence that the discharge will not contribute to a violation of a water quality standard.

Impaired-Waters Monitoring

- Existing permit requires water-quality related monitoring only for approved TMIDL
- New permit will require monitoring for any impaired waters

Monitoring Schedule

Effluent limitations: Monitoring must begin within 90 days after the effective date of the permit.

Benchmarks: Monitor once in each of the first four (4) quarters of the permit.

Impaired waters: Monitor once per year

Criteria and Consequences

Effluent Limits – exceeding limits is a **VIOLATION** of the permit. Corrective action and follow-up monitoring is also required.

Benchmarks - If the average of the 4 monitoring values exceeds the benchmark or any result exceeds 4 times the benchmark, corrective action and follow-up monitoring is required.

For impaired streams with EPA-approved TMDL only, exceeding a wasteload allocation requires corrective action and follow-up monitoring. Otherwise, no follow-up.

Corrective Action

Corrective action means reviewing and correcting the SWPPP within 14 days, and implementing corrections within 60 days.

Follow-up Monitoring

Effluent limits – once, within 30 days after completing corrections. Then, if that does not show compliance, submit an extensive report to lead to attaining compliance.

Benchmarks – quarterly until attaining compliance.

Impaired waters – same as effluent limits.

Notice of Intent (NoI)

A new Notice of Intent will be required, comparable to the **U.S. EPA NoI**.

We will require a **USGS map** showing site location.

The submittal date will follow issuance of the permit.

Toxicity

Toxicity testing will be eliminated!!

Concrete Batch Plant Storm Water (1)



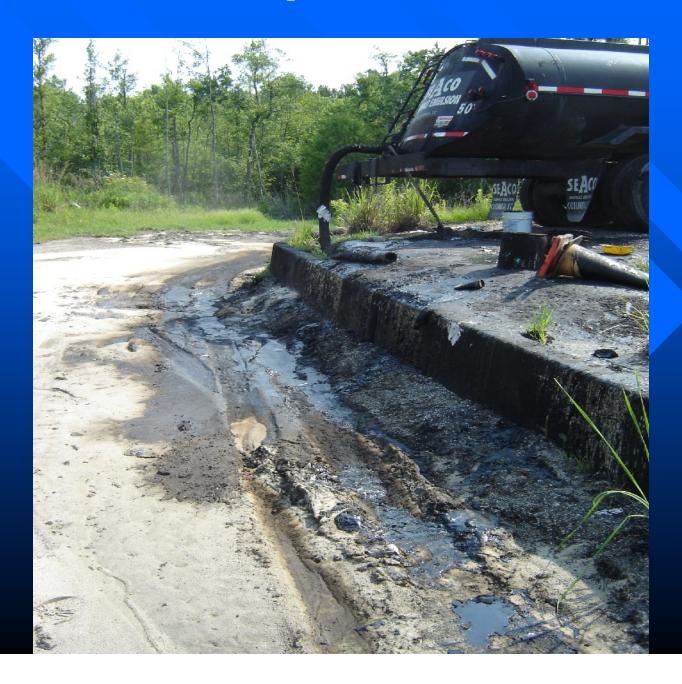
Concrete Batch Plant Storm Water (2)



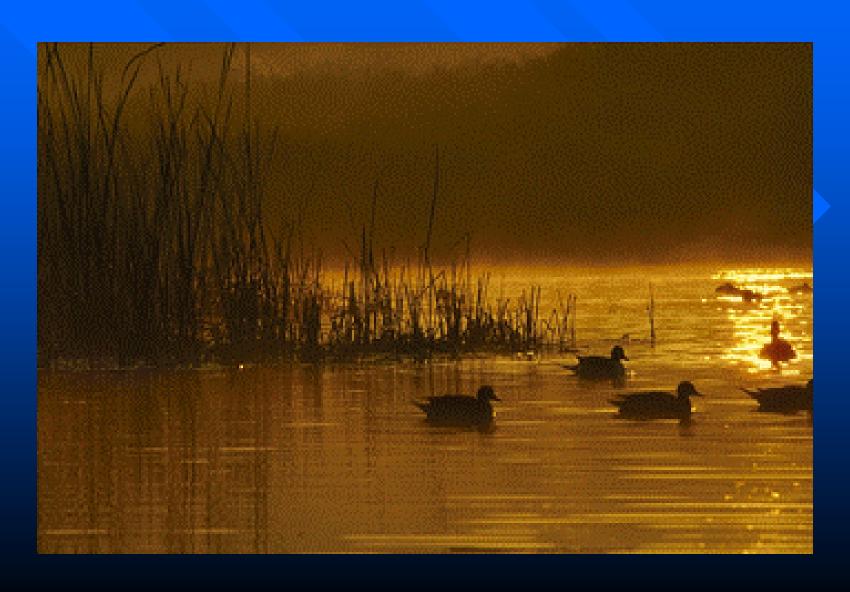
Cement Mfg. and Concrete

- Concern about high pH of storm water, TSS
- Concern about discharge to sensitive streams, such as trout waters, shellfish harvesting waters (SFH), and outstanding resource waters (ORW).
- About 165 concrete batch plants.
 Additional block plants and cement handling facilities.

Compliance Issues



Questions?



Contact Info

Brian Wisnewski, Water Pollution Compliance (803) 898-4160

wisnewbj@dhec.sc.gov